

**IDENTIFICATION FOR RESERVATION OF REPLACEMENT STORAGE
DEVICES FOR A LOGICAL VOLUME TO SATISFY ITS INTENT**

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ABSTRACT OF THE DISCLOSURE

10 A method, system, and computer program product for identifying and reserving
suitable replacement storage devices for use when a storage device underlying a logical
volume fails or when the size of the volume is to be increased. Replacement devices are
reserved if they conform to the intent of a creator of the logical volume and at the time of
creation or reconfiguration of the logical volume. Volume management operations like
resizing the volume and evacuating data from the volume use the reserved disks that have
already been allocated as suitable to preserve the intent of the creator of the logical volume.
15 Reserving replacement disks in advance ensures that a backup disk is available and
eliminates the need to perform a lengthy, time-consuming search for a suitable replacement
disk that conforms to the intent of the logical volume.